DECEMBER 1970

Virginia Wildlife

VOLUME XXXI / NUMBER 12
20 CENTS

Virginia Wildlife

Dedicated to the Conservation of Virginia's Wildlife and Related Natural Resources and to the Betterment of Outdoor Recreation in Virginia

Published by VIRGINIA COMMISSION OF GAME AND INLAND FISHERIES, *Richmond, Virginia 23230*

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COVER: The Virginia white-tailed deer, once reduced to a mere remnant of its former abundance, is now more abundant than ever before throughout much of the state, a symbol of successful wildlife restoration and management. Our artist: Daniel Feaser, Shepherdstown, W. Va.

SUBSCRIPTIONS: One year, $2.00; three years, $5.00. Give check or money order, made payable to the Treasurer of Virginia, to local game commission employee or send to Commission of Game and Inland Fisheries, P. O. Box 11104, Richmond, Virginia 23230.

VIRGINIA WILDLIFE is published monthly at Richmond, Virginia, by the Commission of Game and Inland Fisheries, 4010 W. Broad Street. All magazine subscriptions, change of address notices, and inquiries should be sent to Box 11104, Richmond, Va. 23230. The editorial office gratefully receives for publication news items, articles, photographs, and sketches of good quality which deal with Virginia's soils, water, forests, and wildlife. The Commission assumes no responsibility for unsolicited manuscripts and illustrative material. Credit is given on material published. Permission to reprint text material is granted provided credit is given the Virginia Commission of Game and Inland Fisheries and VIRGINIA WILDLIFE. Clearances must be made with photographers or artists to reproduce illustrations.

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GUEST EDITORIAL

The Hunter

JOSEPH WOOD KRUTCH called hunting "a damnable pleasure." Writers, both before Krutch and since, have grappled with the sport of hunting, attempting to analyze why men persist in what also have been called the "blood sports."

Why would an otherwise sensible man abandon a warm room and a good football game on television, to shiver in a willow-bough blind along some stream in the hope that a flight of mallards might pass? The reasons may vary, with each different man ascribing a different motive to his actions. Duck hunting has a social value among certain types of people, just as fox hunting does. Many people associate manliness with hunting, and that may be a reason, too. Robert Ardrey might state that we hunt because we are descended from killer apes, and cannot do otherwise.

Some opponents of hunting say that hunters just want a bleeding target, though in most cases this is far from the truth. Every hunter goes afield expecting to kill, and is more or less disappointed if he does not. Yet the kill is only a part of the entire act of hunting, and a minor one at that. Except for the borderline few, killing is not the basic motivation behind the hunter.

Non-hunting students of nature have a love for and understanding of the wild kingdom which hunters can appreciate. Those who really understand the interplay of life and death in the wild, know that the hunter often plays a necessary role in the drama of living things. Only the superficial condemn hunting outright; the wiser heads know better.

The hunter has an odd love for his prey species that most of mankind doesn't understand. This respect for and love of a wild creature has made conservationists of hunters. It was hunters' money which created the agencies to manage wildlife and see to it that the creatures were protected—from the hunter! We would be poorer today in wildlife if there were no hunters.

And, though a hunter is interested in a huntable species, the protection afforded the prey usually benefits other species as well. The hunter does not object to this, but takes pride in the accomplishment. The non-hunter reaps benefits, though his contribution toward the preservation and regulation of wildlife may be nil. That's all right with hunters, too.

We confess to a liking for hunters. We're one of them, and find their company easy. That's why this October we'll be crouching, shivering in the reeds, in the same place where, 500 years before, a brown-skinned hunter crouched. He had a bow and I'll have a shotgun, but otherwise we are brothers in a long line of hunters stretching back into the mists of time, impelled by forces we do not understand, but strangely at peace with ourselves for this little space of time.—JAMES F. KEEFE

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LETTERS

Dangerous, In More Ways Than One

I would like to pass on to our readers a note on a very dangerous situation that exists on some of our state waters.

I would never have believed that such an innocent looking piece of material as a plastic six-pack beer holder could be a death trap if I had not seen it with my own eyes.

I live on Lake Smith which is a Norfolk City reservoir. I do a lot of fishing, and on two occasions I have seen wild ducks with their heads stuck in plastic six-pack holders that someone had thoughtlessly thrown overboard.

One duck had one of these holders stuck in its mouth and behind its head and was having great difficulty swallowing its food. I tried in vain to catch and release him.

The other incident involved a wild mallard hen. She had her head through one of the holes in a six-pack holder, and another hole had caught fast on a tree limb at the edge of the water. If I had not freed her she would have died there of starvation, or been taken by a predator.

Please ask your readers not to throw these plastic holders in our waterways.

D. E. Armstrong
Virginia Beach

We do ask everyone to refrain from throwing plastic six-pack holders and any other kind of litter into our waters, and so does the General Assembly who has made it unlawful to do so. In fact, a recently enacted amendment to Section 29-77 of the Code of Virginia makes it mandatory that the court revoke the license of any person convicted of littering while hunting, fishing or trapping, and that's on the very first offense!—Ed.

The Nation's Best

WE are grateful to you for the fine publicity given our program in *Virginia Wildlife* during the past year which helped greatly in our winning the coveted "State Award" given annually by Keep America Beautiful, Inc., for the "most outstanding litter prevention program in the nation during the past year."

The enclosed print (below) shows our new emblem which has met with immediate acclaim wherever exhibited. Hope you can find a spot for it. It is available in decal and poster form at various prices, depending upon quantity ordered, from Art Guild, Inc., 2201 Lake Avenue, Richmond, Virginia 23230 (Att: Sales Manager).

Paul D. Sanders, Executive Director
Keep Virginia Beautiful, Inc.
Richmond

The Candles

THE cold wall of December was glassy with ice. Sleet rattled the windows to glaze the panes on Christmas Eve night. It mattered little. Our family was together in a living room incandescent with the warmth of love and a glowing fire. A festive tree, candlelight, stockings hung, greeting cards and gaily wrapped gifts were sweet traditions the weather could not change.

On Christmas Day the gray sky was slit by a dazzling sun. We could see that candles of Christmas were lit wherever the sun touched the ice. Baubles of silver, garlands of stars, necklaces of diamonds sparkled from every tree and bush,

Later that morning we all went out in the cold to walk in the sunshine. We then understood as we tramped through the woods why nearly every hymn and legend of the Child in the Manger took their substance from trees, wood-timbers, rustic stables and from the birds and animals. The outdoors

Commission photo by Shomon

The Christmas tree and candlelight are traditional symbols of Christmas in the home.

was His only home. The tiny hands of the Infant Child would become the calloused hands of a Carpenter who knew the dignity of old trees, the fragrance of the forest.

The Christmas Tree is the heart of Christmas in the home, a place of honor solidly rooted in story. Thousands of years before Christ's birth the evergreen tree was revered as a symbol of long life and immortality. These trees, alone of all trees, did not lose their leaves so they undoubtedly held Divine power.

The first Christmas Tree, so the story goes, concerns St. Boniface, a monk, who struck with his staff an oak tree before which a group of pagan worshippers prepared to make a sacrifice of a human. As the oak fell from the blow of the staff a young fir tree stood in its place.

"This shall be called the tree of the Christ Child," said St. Boniface to the astounded group: "gather around it in your homes each year. Surround it with gifts and love. It will bring you peace."

Many years later Martin Luther walked enchanted through a snow-covered woods on a starry night before Christmas. The snow on the trees shone like candles. Impulsively he broke a small fir tree and took it home. There he delighted his family by placing lighted wax candles on the branches to show how they gleamed in the snow.

Another Christmas legend tells that an olive, a palm, and a fir tree grew near the Manger. The olive made a gift of its fruit to the Baby. The palm presented its dates. The fir tree had nothing to give so it raised its branches to the sky in adoration, whereon angels hung stars for the Baby's pleasure.

One of the loveliest of the old stories is German. On a cold Christmas Eve night a light knock was heard on a woodsman's isolated cottage door. The forester found on the step a very small boy who was cold, exhausted and hungry. Quickly he and his family made the child welcome with warmth, food, and rest. The next morning the child stood in radiance as he spoke to the family, "I can give you nothing beyond what you have, except for this." Then the child broke a branch from a fir tree and planted it by the door. It leafed into growth immediately. "This is my gift to you. This tree will be your own Christmas Tree, evergreen, and your life will be ever-abundant." As he spoke beautiful music was sung by a choir of angels and the forester and his family knew that their guest was the Christ Child.

In folklore the holly tree has become traditionally associated with good luck. The bright berries were early credited with medical and magical powers. Holly was kept in the house as a protection against witchcraft. Branches were exchanged as symbols of friendship. Holly has also a holy meaning. Its thorns resembled the crown of thorns pressed on the Lord's brow while the red berries were likened to drops of blood drawn by the cruel wounds. The circle of holly Christmas wreaths was symbolic of eternal life.

There is reason to treasure the pearly berries of the soft-green mistletoe. The Romans considered the plant an emblem of peace. Meeting under it enemies kissed and declared a truce, at least for the day. Druid priests in early Britain cut mistletoe with golden knives at the winter's solstice to give to their people to hang over doorways of homes and stables in the belief the vine had power to ward off evil and protect against illness.

In Colonial times invitations to Christmas parties included sprigs of mistletoe as a wish for happiness and prosperity. Mistletoe was hung in profusion where lonely maidens might stand hopefully waiting for the kiss from the right man.

The beasts of the fields and the birds of the air share in the lore of Christmas. There were shepherds with their flocks; there were camels with the wise men. In the time of Christ, the stables were likely to hold in and out of their stalls cows, chickens, donkeys, lambs and doves. All of these have places of honor in Yuletide stories and songs.

It was believed that because the animals helped spread

# of Christmas

By KATHERINE W. MOSELEY
Rixeyville

Leonard L. Rue III photo

Candles of Christmas were lit wherever sun touched the ice.

the glad tidings of the birth of Christ they should be given extra rations on Christmas Eve nights. Many people were sure that animals all over the world knelt at midnight but only the stable animals were also given the power of speech at that time.

Wherever there were animals there was grain. Wherever there was grain, there were birds. Wherever there were birds, there were legends. A brown bird was perched in a tree near the stable where the Baby and His mother rested. A fire had been built outside the door to keep the Holy Family warm as they slept. The bird seemed to realize that something wonderful had happened and the people in the stable were important. Now it was night and the fire had died down to a few coals with no one to tend it. So the brown bird swooped across the dying embers to fan them into flames. The fire grew in strength and the brown breast of the bird was burned a brilliant, reddish gold. To this day the Robin wears a red vest as a tribute to its valor.

In the fields where the shepherds watched their flocks a small, shy bird rested alone on a ledge of rocks. It was a lonely, unhappy little bird because it had no gift of song. Suddenly a bright light shone in the night making even the stony ledge bright. The shepherds knelt in fear. Then an angel spoke and a multitude of heavenly vioces sang, praising God. One angel saw the little bird huddled in fright and spoke,

"Sing with us, Little Bird."

"I cannot sing," chirped the bird.

"Tonight you can," urged the angel. So the little bird tried and was able to sing the same joyous songs of the angels.

After the angels departed and the shepherds turned their steps to Bethlehem, the bird flew along with them. When the shepherds knelt before the manger the little bird flew to a stable beam and sang the angels' song. That is why the nightingale sings like an angel.

Even the rooster has his share of fame. It was believed that, instead of the familiar morning crow, on Christmas morning the rooster calls, "Jesus Christ is born."

These old stories seemed very dear as our family walked through the hushed woods on that shining Christmas morning. The silence of the day was majestic; even the sound of our scuffling footsteps seemed profane. The grandchildren nibbled on icicles, a taste-thrill they will remember long after the Christmas dinner. We were all subdued in that rare hour of frozen stillness.

A sudden puff of smoke against the sky reminded us that the fireplace must need more wood. The Man, whose birthday it was, would know about firewood, perhaps not our kind, but wood to burn to warm the body and the heart. Oak and hickory glow with a clear, golden flame and give the most heat. Hemlock and pine sputter and hiss and burn quickly. Maple wood gives a constant, quiet red radiance. The sweetest fire of all is made by apple wood which burns steadily in a rainbow of color.

As we turned our steps uphill toward the welcoming house, three crows were calling in the sky. Immediately I knew what they were saying in their awkward, unbeautiful voices. They must, on this Christmas Day, like every living thing, whether rooster, quail, cardinal, field animal or human, praise God. We must sing, with whatever lowly, untalented voice we possess, in reverent adoration: "GLORY TO GOD IN THE HIGHEST, AND ON EARTH, PEACE, GOODWILL TOWARD MEN."

THE DEER HUNTER:

By BILL WEEKES
Blacksburg

WHAT MAKES HIM DO HIS THING?

The birds migrate. Ocean-going salmon return to their native streams to lay eggs and die. Bears hibernate. Beavers fell trees to build dams and lodges, arresting the flow of water from on high.

And Nimrods roam woods and fields in quest of deer.

Naturalists call the yet inexplicable habits of fauna "instincts." Is man's quest for game—for the buck, to be specific—instinct? Or just what is it that draws him to the hunt?

For all—like those who gather at the weighing station in the Union Church section of Patrick County—deer hunting is something done because it is "enjoyable."

"I do it because I enjoy it," some will say simply. "I enjoy getting out."

Surely to escape the normal routine is one reason, or a partial reason.

"I like to be out in the open, be with nature," admitted Glen Pickerel of Bassett." He echoed a common craving.

Another confessed he enjoyed "getting away from my job."

But the Nimrod, like the timber wolf, is a gregarious hunter. This is not, however, because the increase in his numbers will necessarily better his chances of downing his prey. Rather, the human huntsman, unlike the wolf, demands an added ingredient to his enterprise—fun. And the more buddies you bring, the merrier the hunt.

"We get together and hunt, but have just about as much fun coming up to our cabin and goofing off as we do hunting," said Raymond Stone of Martinsville, a member of the Five Oaks Hunting Club.

Another Martinsville hunter sort of laughed when asked why he hunted deer.

"My freezer's bare. I've got to get something to fill it up," he uttered.

"The average hunter doesn't hunt for the meat; that is, if he's a sportsman he doesn't," stated Patrick game warden Gordon Preston. "Deer hunting is exciting. Any one can kill a rabbit or a squirrel, but it's something to kill a deer."

Terry Harrison of Martinsville with spike buck he killed in Smyth County. Deer checked in that part of the state last year tended to run below average in antler development and hog dressed weight.

"When the fall comes, something gets in the blood of the hunters so that they like to go out and get something," observed Hal Myers of Amherst, state game biologist. "It's some sort of instinct, this going out together. It's not for the meat though."

Man doesn't need the meat, this is true. Some hunters say venison, if fixed right, is delicious. Many hunters can either take it or leave it as a food item. For sure, man doesn't have to get a deer or starve.

So what is this "something" that draws Nimrod and his pals out to kill a deer?

Some will throw in a little comedy to forestall a serious answer.

"Why do I hunt?" answered an Eden, N. C., hunter. "Because I'm crazy. I figured that out after I just about froze myself to death this morning without ever seeing a deer."

Glen Pickerel got one with seven points, three on one antler, four on the other.

His buddy, also from Eden:

"I'd rather deer hunt than hunt quail and rabbit. At least I don't have to walk myself to death before getting nothing."

But we press on and ask what makes "it" exciting, "it" enjoyable.

A big hunter from Bassett, wearing a yellow-brown coat and cap was serious.

"I've been hunting deer three years and I'm still looking for the big one. I'm still hunting for the big rack I want to put on my wall. I used to hunt bird and quail, but once I started hunting deer, I don't care about the others anymore."

Bringing back a trophy is a challenge. A Bassett youth, out for his first venture, likened bringing back a buck to going out and bringing back a shark.

"It's just the odds on getting one," explained Huel Puryear of Martinsville. "I'd say every time you go into the woods, you have one chance in 40 of killing a deer. I've been hunting seven years for deer and every time I see one I get my heart in my mouth. I'd guess you'd call it buck fever. I keep wondering when I see one whether it will ever get close enough to shoot."

Last November, on opening day, a buck did get close enough to Puryear and he downed a 200-pounder, his first deer ever.

"If you go by the rules and regulations, it's hard to kill one," observed Terry Harrison of Martinsville. "It's a challenge. You get sort of scared when you see a buck and think he's coming up the path or through the woods toward you. You think you might miss him. You are wondering whether he's going to get away before you get a chance at him. He'll only give you a few seconds and he's gone. If you wait too long, he may go the other way and then you've blown it. Of course, whether you get a chance to see a deer or not depends on the terrain.

"You can walk half a day to miss one," Harrison continued, "and then you have to walk back feeling like wrapping your gun around a tree. I waited eight years and missed a whole lot before getting one."

So, unlike the hungry predators, the human Nimrod is motivated rather by the "challenge of it all." However, where the wild predator contributes toward maintaining the balance of nature, so the domesticated predator, *Homo sapiens*, is capable of contributing something too.

"We try to preserve, to be sportsmen," stated Pickerel, also a member of the Five Oaks Hunting Club. "We plant food patches, with seed and corn. And by hunting as a club, each knows where the other is. This makes our hunting safer."

The club has leased land on which to hunt.

"In the future this will be the only way to hunt," stated Ray Stone. "Eventually all land will be posted and landowners more than likely will allow a club to hunt before one or two individuals."

As a club, the members get the lowdown on where the deer are located.

"We start six weeks to two months ahead of the season," Stone related. "We go all over the land, finding out where they're feeding and bedding down. This enters into the skill of getting one.

It's more or less a waiting game, but you have to outsmart them."

"I enjoy trying to outsmart them," stated Clayton Hub-

(Continued on page 19)

Tommy Bowles of Martinsville, hunting in Southampton County, got one with very abnormal antler development and a total of sixteen points. This unusual antler growth may have been caused by an injury when antlers were in an early stage of development.

HUNT AND HARVEST THE SURPLUS

By BOB GOOCH
Troy

THE beagle music was getting closer. In fact I was beginning to fear the rabbit had slipped between us, but then Joe brought his automatic to his shoulder, swung on a fast moving target, and—and then lowered his gun!

My expression registered a question.

"Rabbits are too scarce," he said. "Decided to let that one go."

Joe had a point. This had been one of those years in the Old Dominion. The usually prolific cottontail had suffered from something. Disease? Predators? Though plentiful in early fall, they had seemed to vanish almost completely by November.

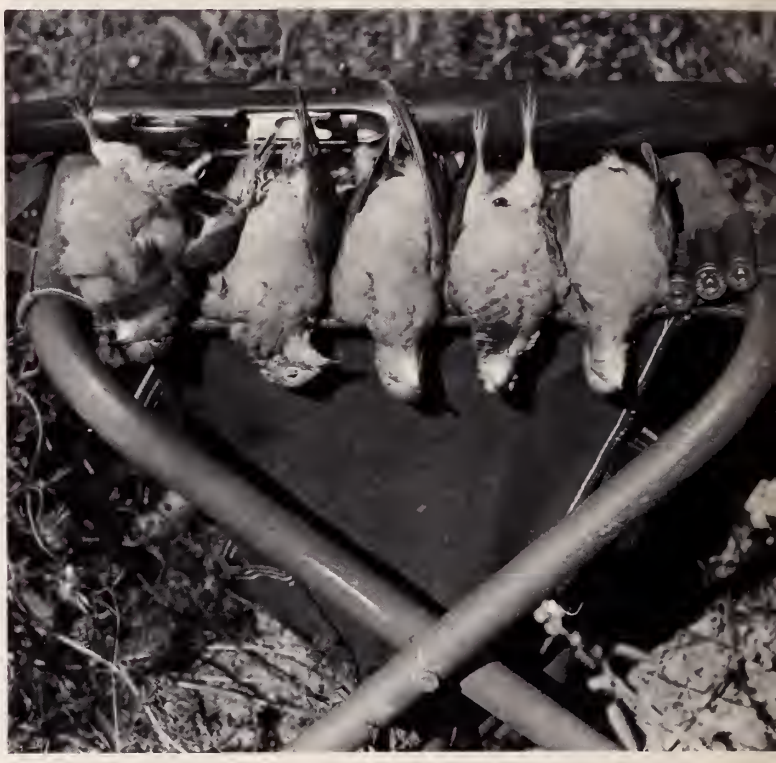
Rabbit populations are like that. Bunnies live a sort of rags to riches to rags existence. Plentiful one season and practically non-existent the next.

Joe could have bagged that rabbit and been within his rights. As it had been for years the daily limit was 6 and the season limit was 75, and he hadn't come close on either count. No one could have criticized him if he had tumbled that bunny head over heels and stuffed him in his game pocket.

Does the hunter have such a responsibility in a situation such as this?

I think he does.

Harvest by hunters of a surplus of sika deer on Assateague keeps the herd within the carrying capacity of the island range.



There is usually a harvestable surplus of doves.

The Commission of Game and Inland Fisheries, working months before the season opens and for the most part limited to the records of previous seasons for guidance, comes up with limits and seasons it feels will protect our game species from exploitation. The Commission attempts to permit the harvest of the surplus which would otherwise be lost to natural causes. However, it must work on a statewide basis and for the purposes of simplification set seasons, limits and regulations that are reasonably easy to understand. Too many exceptions make it difficult for the law-abiding hunter to pursue his sport without the fear of unknowingly violating some regulation.

It follows that the hunter should recognize the fact that game resources may be low during a particular season, or in a particular locality. Only he can protect a species when heavy, though legal, hunting in a certain area has completely harvested the surplus. Or suppose unusually severe weather eliminates the surplus long before the season ends? The conscientious hunter will be guided accordingly.

Of course the hunter cannot always know when he is harvesting the surplus only.

For example, the popular mourning dove is prolific and a fine game bird. The gray ghosts seem to be able to withstand unusually heavy hunting pressure. Extremely cold winters take a heavy toll also, but this comes many weeks after the fall hunting is over and it is then too late for the dove hunter to exercise restraint. Maybe it is just as well, for enough birds seem to survive to fill the cornfields the following fall. There always seems to be a surplus.

Quail, too, enjoy fairly constant population levels from one season to the next. The hunter's responsibility is mostly a

Virginia's annual surplus of deer provides some of the best whitetail hunting to be found anywhere.

matter of guarding against the over-harvest of individual coveys, and assuring himself that he and his companions leave healthy seed stock for next season's crop. Few coveys can give up a pair of daily limits of 8 birds and still prosper. A covey of 16 quail is considered a good one in most quarters.

Old Dominion deer herds appear stable, and the annual surplus provides Virginia big game hunters with some of the finest white-tail hunting available anywhere. It is true exceptions confuse the general limits of one whitetail per day and two per season, and anterless seasons recognize population variances in the eastern counties. But there is still room for the deer hunter to practice a little game management on his own. There are a few weak spots in the generally rosy picture, and with all the deer hunting to be had in the Old Dominion the hunter should be able to concentrate his efforts in the areas of abundance. Refraining from taking does where the herds are marginal is an excellent way for the big game hunter to demonstrate his concern for the future of deer hunting.

Over-hunting with dogs in certain eastern counties has reduced deer herds to a marginal level. A little restraint on the part of a few deer hunting clubs could have prevented this.

Virginia deer hunters got an unusual opportunity to hunt exotic sika deer on Assateague Island a few years ago. A population explosion was posing a threat to the waterfowl on the Chincoteague National Wildlife Refuge and a special hunting season was opened to harvest the surplus deer. The deer numbers are now within the carrying capacity of the refuge.

Squirrels, often abundant in the late summer and fall, suffer from hunger in the dead of winter if the mast crop has been light. Many die from malnutrition or disease aggravated by their weakened condition. Though the season runs through January, hunting squirrels under such conditions may be unwise. The harvestable surplus that raced through the treetops in October has now been lost to natural causes. The hardy animals that remain are essential to next fall's hunting. When such conditions exist, the squirrel hunter should turn his attention to other game.

As my friend, Joe, so well recognized, rabbits are highly vulnerable to predators and disease. Fortunately, cottontails are our most prolific small game animal. Given half a chance they can bounce from famine to fortune in a single breeding season. When they are down and struggling to maintain a foothold, the prudent hunter will chase them with his beagles and enjoy the hound music, but pass up most of the shooting until next season. Chances are he will be able to fill his game bags then—from the surplus of rabbits.

Our wild turkey flocks must be hunted and harvested selectively if they are to survive. This is particularly true east of the Blue Ridge where prime hardwood forests are being lost to fast growing pines. In this heavily populated section of the Old Dominion where turkey flocks seem to be relegated to a marginal existence, bearded birds only are legal. Even before the Commission adopted this restriction, concerned turkey hunters were limiting themselves to the gobblers.

There is usually a surplus of gobblers—even in the eastern territory—and they can be harvested without damage to the basic stock. Many turkey hunters now confine their hunting to the spring season when the gobblers are easy to identify.

A limit of quail is half of a fair sized covey.

The black bear is rarely abundant in the Old Dominion, and his welfare calls for constant vigilance by both game managers and hunters. Since they do not produce offspring every year, bears are not particularly prolific. The bear, like the turkey, also suffers from loss of habitat. The Virginia bear surplus is probably low the majority of seasons.

The hunter has been under the gun in recent months and his critics condemn hunting, but God put game on this earth for man to use wisely. The hunter who limits his harvest to the surplus of game complies with this divine mandate.

And he has an answer for his critics.

Let's Cook Muskrat

By MARJORIE LATHAM MASSELIN
Richmond

IF you manage to survive the excesses of the winter holidays, get the ham bone scraped naked and into the soup pot, and find yourself wincing at the idea of eating one more turkey sandwich, there will be a short period to follow during which a can of tuna fish or a package of jello looks simply *marvelous*. But they pale, too, after a while. About the same time that your faded appetite is at its lowest ebb, the supermarkets enter their late winter doldrums. One wanders from brown lettuce to limp carrots to woolly apples, and in spite of the wax coating, applied to increase their longevity, even the turnips look tired. My husband was as unimpressed with the display as I, and both of us, as usual, were aghast at the prices of meat. Fortunately, I still had a breast of venison which I intended to bone, marinate, and prepare as a stuffed rolled roast à la Nicoise. There was one more wild duck, a fish or two, a chunk of cheese for fondue and plenty of good fresh eggs from the country. I was about to suggest that we go home and poke under the leaves in the garden for some fresh parsley to add to an omelet when my husband said,

"Let's go down to the Farmer's Market. It *couldn't* be any worse than *this*."

It wasn't. It was much better. It always is, but it is a chore to get down there and I am lazy. Each time I get out of the habit of going and then renew my acquaintance with the Old Market, I am annoyed thrice over that I do not make a more sustained effort to shop there.

Even at the tail end of the season, an apple purchased from the hand that picked it is bound to have fewer dents and more flavor than one which has been kicking (or been kicked) around from farmer to wholesaler to retailer to you. Things are always fresher, sometimes cheaper, and perhaps because I grew up on a farm and know a little about the sweat that goes into producing a marketable crop, I am happier to part with my dollars when I can place them in a hand that is a step nearer the hand which harvested them.

Furthermore, there is a variety of food available in the shops both on Richmond's Marshall Street and along Seventeenth Street, that one never sees in the supermarkets. At the appropriate season, one can find such things as sweet cider, unspoiled by the addition of a preservative, which tastes the way cider is supposed to taste. The fish markets smell the way a fish market ought to smell, like the faint sweet odor of the sea. On occasion one finds there thick pink sturgeon steaks veined with yellow fat. On this particular day we brought home two beautifully dressed muskrats at a dollar and a half for the pair.

These had been very nicely dressed and cleaned of fat, so there was nothing for me to do but cook them. However, in dressing a muskrat oneself, the layer of fat between muscle and hide should be carefully and completely removed. This is not difficult: it pulls off very easily. The only ticklish part is in avoiding the musk glands on the lower belly. If you cut into *those*, forget the whole thing! There is also some white stringy tissue on the inside of each leg which needs to be removed.

Muskrat can be fried, baked, barbecued or stewed. And except in the case of stewing, it is customary to parboil it first. In the case of a very old muskrat, it is advisable to marinate it as well. You can do either or both. Personally, I am of the opinion that too much cooking is a needless waste of nutrients and flavor. Consequently, I do not recommend that a cook parboil unless the liquid used is to be reduced and added to a sauce. But each cook to his fancy in that matter. There is one other idiosynacrasy that clings to the lore of game cookery, and that is the idea of soaking game in salted water for—oh—anywhere from hours to days, depending on the recipe. The idea behind this strange practice is that a saline marinade removes much of the "gaminess" of game and thereby "improves" its flavor. I have had cooks tell me that if I would just soak my rabbits in salted water for twenty four hours I could *never* tell the difference between it and chicken! Well, of course I can, and so can practically anyone else with normal sight and taste buds, but if it makes your game taste better to you, why soak away, unto thine heart's content! About the only improvement that soaking *any* kind of meat in *any* kind of liquid will make, is to tenderize it somewhat, depending, of course, on the age of the meat, the ingredients in the marinade and the length of the soak. Water, alone, is often enough to restore the tenderness to otherwise good meat which has for one reason or another been allowed to dry out, as frequently happens in careless freezing.

By and large, it is my considered opinion that the majority of harvested wild game can *best* be "improved" by proper handling and dressing *in the field*, and also by proper killing. I realize that the use of a rifle is restricted to certain areas and that the shotgun is the weapon most widely used. The fact remains, however, that the use of a shotgun limits the enjoyment of the meat. Consequently, one of the nicest things about a muskrat is that the animal is among those which are hunted by trapping. There are no gunshot wounds to probe.

To summarize, while there are various ways, all acceptable, to handle a dressed muskrat prior to cooking it, my own preference is simply to proceed with the cooking proper,

avoiding (except when treating a tough old customer) all the "soaks", marinades and parboilings.

Muskrat en Casserole

This is a sort of "Julia Child" treatment, which is to say it is a classic French preparation insofar as method goes. The French eat a good many strange things, but I am not aware that muskrat is among them. However, *this* muskrat is going to be cooked with a "mirepoix" and that is about as French as cooking ever gets. To make one, you gather 1 onion, 1 carrot, 1 piece of celery complete with leaves at top, 2 or 3 sprigs of parsley and a clove of garlic if you like garlic. Peel the items that require peeling, and then mince everything as finely as your skill and patience permit. A large and heavy knife will do the job best.

Melt half a stick of butter (about 4 tbs) in a heavy casserole which has a tightly fitting cover. This is so that it will not be necessary to change dishes later. Add the minced "savories" to the butter and simmer just long enough to soften them and to bring out their flavors.

For this dish we will use only the hams and shoulders of the muskrats, so it is advisable to have at least two. Dust each piece with salt (the tenderizing kind is a wise precaution), pepper and flour. Add these, one or two at a time, to the simmering mirepoix, and fry them just long enough to brown the outside. Remove from heat, cover tightly and set in a slow oven, 300-325 degrees, for an hour or more until the muskrat is perfectly tender. The meat will have generated its own juices during cooking.

Remove the meat to a hot platter and deglaze the casserole with a little Madeira wine. Thicken with a roux of flour, rubbed into soft (but not melted) butter, and finally, stir in ⅓ cup currant jelly. Strain this over the meat on the platter and serve.

Plenty of hot, light-as-a-feather biscuits to mop up the gravy and a rather large bowl of greens, cooked Southern Style, are the best possible accompaniments for this, and it would be rather silly to give Virginians a recipe for either of *those* jewels of the Southern Kitchen!

Muskrat can also be fried, especially if the animals are quite young. I like to do this the same way I do chicken, which is to fry it just long enough to brown it nicely; then finish the cooking in the oven. Sweet potatoes go so well with muskrat that it serves a double purpose to cook the meat in this manner, because well-scrubbed yams, rubbed with a little butter, can be baked right along with the meat. Some people like a crisp salad with this kind of dinner, say a combination of apples, pecans and celery, but we always feel cheated without a pot of cooked greens. Any kind will do, but we especially like mustard greens.

Fried Muskrat

Cut each muskrat into about 6 pieces. Season these with tenderizer salt and pepper and rub in a little flour. Let this rest for a minute, and then dip each piece in beaten egg and finally in cornmeal. Brown on all sides in very hot fat. For the fat I prefer to use plain old-fashioned bacon drippings which I save religiously and hoard in a covered bowl in the refrigerator until I have enough to use in this way. Of course you *can* use vegetable shortening or oils of various kinds, but there is something about the flavor of bacon fat which just cannot be duplicated by other means.

Remove the browned pieces of muskrat to a heavy iron or copper pan and continue cooking in a moderate to slow oven for about an hour.

A cream gravy can be made just as one would for fried chicken. Pour off all but about 3 tbs of the fat, add 3 tbs flour and cook for a minute or two. Then pour in slowly 1½ cups of sweet milk and stir until thickened. Serve this over the muskrat.

Barbecued Muskrat

Marinate the whole animals in a sauce made of equal parts hot catsup, Worcestershire sauce and plain cider vinegar, for at least 24 hours and longer if desired. The idea here is that the meat should have time to absorb the flavor of the marinade.

To cook, spit the muskrats over a well banked charcoal fire, and, using a long handled brush, paint the meat with the marinade at intervals of fifteen minutes or so throughout the cooking.

I think sweet potatoes belong in this menu, too, but with barbecue, they seem to be better boiled, then mashed and beaten smooth with plenty of butter. A crisp salad of the rather "bitter," "herby" greens such as curly endive, watercress and—if you can find any—young, tender dandelions. Since we used cider vinegar in the marinade, it should also be used in the salad dressing.

Stewed Muskrat

This is the best way to use a rather large muskrat which is at least mature and very likely a bit on the tough side. Cut it as you would for frying, season with salt and pepper and brown the pieces in a little fresh bacon fat that has been obtained by frying out two or three slices of bacon cut into small pieces. These stay right in the stew pot.

Add quartered onions, rather large sections of carrots, and a small to medium purple-top turnip cut into large dice (or 2 parsnips can be used instead of the turnip if preferred). Pour in enough tart red table wine to cover the meat and vegetables, and simmer, covered, adding more wine or water from time to time until the meat is ready to fall from the bones.

Thicken with a roux and serve over steamed rice. A "fruity" salad such as the variation of Waldorf salad mentioned above, is a perfect foil for this hearty, country supper.

DUCK WATCHING

By JOYCE FITCHETT RUSSELL
Kilmarnock

"ANYBODY who'd get in a duck blind without a gun *has* to be crazy," he said. From his home on the shore he had seen the decoys around the blind this Sunday morning and had come out in his skiff to check on the hunters. He had found me, armed only with binoculars.

The unlikely situation had begun the summer before when my son had informed me no self-respecting bird watcher could be satisfied with identifying only songbirds. Shortly he and his father engineered a boat trip to nearby Hughlett Point on Chesapeake Bay for the sole purpose of introducing me to shore birds. They had led me in a vigorous hike along the shore, ending with a long, hot crawl through the grass until I could with some certainty recognize the common spotted sandpiper, the abundant semipalmated sandpiper and Wilson's plover (smaller than a killdeer, its "wheet" call and pink legs were diagnostic).

Now my men were enjoying the most productive duck hunting in memory, and they agreed I would appreciate the spectacle. At first I demurred, overtly because I opposed killing, secretly because I have an aversion to arising before dawn.

Sitting at the breakfast table this sunny Sunday morning after Christmas, I realized plans were turning into action without my consent. I protested I would freeze, but my objections were somewhat mollified when I saw the stack of wraps they had sorted out for me. Longjohns, insulated underwear, wool slacks, turtle-neck sweater, sweatshirt, wool shirt, scarf, wool hat with face mask, wool gloves, rubber gloves. The rubber parka went into the duffle bag with the other gear. When I was ready to don my lined boots, I had to pad outdoors in my woolsocks to work them on standing up; I could not bend.

On the way out Indian Creek, the boat scared up large flocks of oldsquaw, easily identified by the long tails of the males and the dappled effect of gleaming white and black markings as they circled to land behind us. Also, there were many scaup with males glistening white of body and black of head, neck and tail. This species we hoped to see close-up.

Heading up the Bay, we came to the mouth of Dividing Creek, where stood one of a series of five stationary blinds licensed by my husband and three friends. With practiced ease, he began unwinding lead weights and tossing overboard scaup decoys. Fascinated, I watched them dip and pirouette as if they were alive.

Suddenly the boat nudged the blind and I realized the deck was too tall for the ladder. Our son scaled the brushed side of the blind and grabbed my arms. Before I could rebel, my husband gave me a boost from behind and I went over the top! Bruised except for the padded clothes, I nevertheless had to soothe my ruffled vanity.

Before the boat had disappeared around the bend, a flock of scaup pitched and I stifled a gasp. We were concealed beneath a shed roof, able to whisper and move slowly without frightening them. More scaup came in, quickly, quietly, dipping from side to side to brake their descent. Webbed feet spread out, they settled on the water and swam unhesitantly among the decoys. Their blue bills were obvious. Now I could see that the "black at both ends and white in the middle" description was accurate for flight identification, but in close range the gray back and iridescent head were discernible. The brown female had a circle of white around her blue bill. Like many hunters, I cannot tell the difference in the greater and lesser scaup. The smaller one has a purplish rather than greenish head, and shorter white wing stripe, according to ornithologists.

In the constant going and coming, several common goldeneyes mingled with the swimmers. Only the heads of these birds are dark: the female's brown, the male's green. The neck, breast and body are pure white, with black wings barred with white. On the male's face is a round white spot, and, of course, the eyes of both sexes are bright yellow.

As I watched the birds diving, preening and flapping their wings, as if stretching from relaxation, my son called my attention to a flock of birds warily circling the blind. Larger, with wings farther back than those of other ducks, these birds had to be canvasbacks. The aristocrat of Bay ducks is unmistakable with his reddish brown head, sloping bill, flat head, black breast and white stomach. Females are nondescript brown-grey, but the long flat bill is easily recognized. Close up, his red eye is characteristic. Pitching and remaining on the outside of the other ducks, they always held their heads erect, prepared for quick exodus, even though all the other ducks crouched comfortably. At one time several redheads came in with the canvasbacks. Marked like the can, they have round heads, short necks and blue bills shaped like those of other ducks.

Well beyond these birds a pair of chunky ones swam. The male was black with a mottled red bill and white spots on the back of his head, on his forehead and on his bill. Beside him his brown mate had white spots on her cheeks and head. What I thought was a rare, exotic bird was, in fact, a very common surf scoter.

Inshore a flock of tiny bufflehead swam. Using the field glasses, I could vaguely see their patches of white, black and brown. I had hoped I might get to see them playing with the decoys, but they preferred protection from the sharp wind today.

The approach of an outboard motor boat sent the birds in a splashing run on the water with a rush of flapping wings as they escaped. Here came our friend ashore, shaking his head at our pastime. Back came my husband too; our duck watching was over.

VIRGINIA WILDLIFE ☆ ☆ ☆ ☆

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

HUNTERS DOWN 3,901 DOVES ON ELM HILL. Dove hunters brought down a total of 3,901 doves during September on the Game Commission's Elm Hill Wildlife Management Area which proved to be the hottest area this season, reports Refuge Supervisor D. B. Duffer. A new record bag was set on opening day when 1,950 were killed. A total of 389 hunters used the area during the month. They fired an estimated 15,000 shells and bagged an average of 7.09 doves apiece.

POCAHONTAS FOREST OPENED FOR HUNTING. Approximately 5000 acres of the Pocahontas State Forest in Chesterfield County were opened experimentally to hunting this fall, through a cooperative program involving the Virginia Division of Forestry, the Division of State Parks and the Game Commission. The area is open for all regular seasons as prescribed for Chesterfield County except that spring turkey hunting will not be permitted due to conflict with camping activities during the season. A state forest permit, available from sporting goods outlets in Richmond and other sources near the forest, is required but is also good on the Cumberland, Buckingham-Appomattox and Prince Edward State Forests.

PORTION OF GATHRIGHT AREA CLOSED TO HUNTING. Slightly over 1000 acres of the Gathright Wildlife Management Area lying east and south of the Jackson River in Alleghany County will be closed to hunting this season to avoid interference with construction work now in progress on the Gathright Dam. Additional Forest Service lands outside this area are also closed to all hunting. This segment of the Jackson River was closed earlier to all boating and fishing to avoid injury to recreationists.

HUNTING PERMITTED IN THREE NEW PARK AREAS. Cooperative agreements were signed between the State Department of Conservation and Economic Development, Division of State Parks and the Commission of Game and Inland Fisheries permitting experimental hunting on three new park areas in the state beginning last fall. Major portions of Occoneechee, Smith Mountain and York River State Parks were added to the State's open hunting lands beginning with the archery season. No special permit is required on the areas and hunting regulations applicable to the county in which the park is located apply. Small portions of these areas are posted as wildlife sanctuaries or safety zones for the protection of buildings, livestock or park property.

The Occoneechee Park Area consists of about 1000 acres lying along the shores of Buggs Island Lake opposite Clarksville. The shoreline is expected to offer some duck hunting and the uplands have fair to good populations of deer, turkeys and squirrels. No permanent duck blinds are permitted on the area.

The York River Park tract consists of 2507 acres in James City County, known locally as Ferguson Farms before its acquisition by the Division of Parks. It has an excellent deer population plus good numbers of other resident upland game. Most of the tract is wooded and Taskinas Creek cuts through the center. It fronts about three miles on the York River and some good waterfowl shooting should be available from the shore. No permanent blinds are allowed. The upland areas offer quail, rabbit and squirrel opportunities while some jump shooting of waterfowl is possible along portions of Taskinas Creek. The area is reached via Routes 607 and 606 from Croaker.

Smith Mountain State Park lies on a peninsula on the north shore of Smith Mountain Lake south of Whitehouse along Route 626. The rolling wooded uplands are excellent for squirrel hunting with a few quail and rabbits to be found along the grassy lakeshore. There are a few deer on the area. Waterfowl hunting, although permitted, has not been very productive on the lake.

All of these parks are relatively undeveloped at present, the emphasis being placed on acquisition to beat rising land costs. Camping facilities are available at Occoneechee, but persons using the other two must patronize nearby private camping facilities. The addition of these areas brings to six the number of state parks where hunting is allowed at present.

RED HOT WINTER SHOOTING

By BILL COCHRAN
Roanoke

LATE winter, when most of the hunting seasons have ended, sportsmen who know how to hunt crows often get more shooting in a single afternoon than the average upland game hunter enjoys all season. My friend Glenn Dudderar was assuring me this one February day as our car pitched up and down like a roller coaster through the hills of western Virginia. Glenn, Ollie Newell, Don Estes, Don Gnegy and I were headed for crow country.

A short while later, Glenn shimmied up a pine tree carrying a wide-eyed owl decoy, which he placed in the topmost branch, like a Christmas tree star. We've found a good owl decoy to be an important ingredient for a successful crow hunt. Crows dislike owls. Fact is, they hate their guts. The two are always at each other's throats. We were counting on this natural-born dislike, along with some high-grade calling, to lure crows within shotgun range. If things went right, in a few hours our shotguns would be smoking hot.

Glenn, Ollie and the two Dons annually bag more than 1,000 crows during the roosting season. That season in Virginia begins about the first of November and lasts through the first of March. It is then that large concentrations of crows, often thousands of them, gather together in a communal roost. Most of our crow hunting is done in February, when the majority of the game seasons have ended, and spring fishing has not begun. It's a great way to spend an otherwise drab month.

"Some of the larger crow roosts in western Virginia will number as many as 25,000 birds," Glenn had explained earlier. He is a wildlife specialist and an ornithology instructor at Virginia Polytechnic Institute. The average grouping in our area will be 3,000 to 4,000, which is a lot of birds, but a number dwarfed by flocks in some parts of the country. Nonetheless, our crows are thick enough to offer some top sport.

Earlier in the week, Ollie had located the roosting area we were hunting by driving the rural roads visually trailing the afternoon flights. At night, the crows roost together for warmth and protection; then, come morning, they scatter outward to feed, sometimes as much as 30 miles, returning in the afternoon to roost. It is when they return, in pairs, threes and small flocks, that they offer excellent shooting.

A roost can be identified by the droppings, feathers and broken twigs strewn about on the ground. Generally, such roosts are found in pine or brush thickets away from human habitation and in a spot the crows can keep watch in several directions. Just why the crows will choose one roosting spot over another area of equal features isn't entirely clear, Glenn says. They'll fly over a number of potential roosting sites in order to reach the one they use.

Left: Heavy-laden crow hunters head for pine thicket where they will set up for action. Right: Glenn Dudderar climbs pine tree with wide-eyed owl decoy.

L. L. Rue III photo

Glenn Dudderar starts electronic caller which helps lure crows within range. The crow is the only species of wild bird or animal that may be taken with the aid of recorded sounds.

Once the owl was in place, we carefully hid ourselves in a clump of pine trees. You need maximum concealment for success, because a crow's eyesight is extremely sharp, and so are his wits. We wear camouflage or drab clothing and fashion blinds from limbs and other natural growth at hand in order to break up our outline.

To draw the crows within range, we use a battery-powered, portable electronic caller which amplifies the assembly and fighting yelps of a crow. Glenn also blows a mouth call. These are fairly easily mastered with the help of a tutor or one of the many phonograph records of instructions now on the market. You don't just blow a crow call like you would a whistle. You exhale into it, forcing a guttural, grunting sound into it from deep inside your stomach muscles.

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Left: Owl decoy is placed in top of tree where crows can spot it easily. Right: Action starts as Don Estes takes a crack at crow with his double barrel shotgun.

Winter Shooting (Continued from p. 15)

Glenn started the caller, which shouted the news in crow language, that an owl was in the area and needed to be dispatched quickly. Just to egg the birds on, he also began blowing a distress call, which is a drawn-out, raspy wail sounding much like a crow getting his neck wrung. This often will drive nearby crows into a frenzy and bring them in full of fight.

No sooner had the calling started than several crows pitched in silently, spotted the fake owl, and began to dive-bomb it. Glenn and Don Gnegy swung on one at the same time and pulled their trigger. Boom! A crow, seemingly as big as a turkey buzzard, came crashing down through the treetops.

Many of the crows we bag during the roosting season are migratory, having shifted down from the north, and they are considerably larger than our native birds. As the calling continued, several more big ones came cawing in; then they suddenly grew silent, breaking their flight pattern and flaring off.

"Something's wrong with our setup," Glenn said. We looked the situation over—our calling sounded proper, our concealment was good—and although everything appeared perfect to us, it was quite evident that the crows didn't like it. Something was causing them to flare away. We decided to move.

Fortunately, the afternoon was still young. Our crow shooting normally begins around 2:30 p.m., with the best enjoyed about the last hour before sundown. If the weather is bad, crows often will return to their roost earlier than normal. On a pretty afternoon, though, the kind we were hunting, they take their time, returning in lazy flights, pausing often to loiter in a pasture or to sit on fence posts.

We moved our setup to another pine patch approximately one-half mile away. Back up into a treetop went the owl decoy.

Normally, it's no problem to get permission from a landowner for crow hunting. Most farmers view crows as villains, since occasionally they are hard on crops, particularly corn. Where we hunted, the farmer thinks the only good crow is a dead one.

This time the crows couldn't see us; that was for sure. The pines were so thick we had to shoot through small openings, which made the birds tough to hit. They always are a tough target, though. They come jetting in at treetop level which makes one downed out of every three shots a pretty good average. Shooting crows is considerably different from bearing down on birds flushing out of cover. Perhaps it's most like duck hunting and dove hunting.

Don Estes watches in shadows as high-flying crow comes over.

Glenn Dudderar places owl decoy over gun barrel for easy carrying.

Often we use these late season crow hunts to dispose of any shotgun shells left over from the game seasons; therefore, the lead we throw at crows can differ considerably in size. Most hunters use 7½ shot, but some prefer the wider pattern of 8's and 9's. Crows look big and tough, but it doesn't take a whole lot to bring one down.

The very best shooting is found when these birds, whipped to a frenzy of excitement, crowd overhead to dive down in attack at your owl decoy. Few forms of shooting are faster or more exciting. You can bang away until the barrel on your shotgun is smoking hot, and you reach out to grab another shell only to find you've shot them all up. On occasions, crows will blacken the sky so thickly that it gives you an eerie feeling.

But not this time. The crows we were hunting proved to be awesomely shy. "These birds have been shot at before," Glenn exclaimed. "They are wearing a Phi Beta Kappa Key around their neck." Perhaps someone had gunned them in their roost. Generally, it's best to set up your blind along the roosting flight lanes, and intercept the returning birds with call and decoy, if you want to hunt a single roost several times.

We bagged about 25 or 30—on a good afternoon you should get at least 100—then, right at quitting time, they began swarming in like we had hoped they would all afternoon. Hackles raised and squalling for a fight, they attempted to dislodge the owl decoy from its resting place. Few critters can match the wits of a crow, but when it comes to a good fight, often they'll throw caution to the wind. We blasted away, and for a few moments, there was a steady thump of crows hitting the ground. Then, just as quickly as it had started, it was all over.

Around the beginning of March, the large roosting flocks begin to break up, when the birds become sexually active and start to pair off, Glenn said, as we picked up our gear to trod back to our car. We quickly made a date for another crow shoot before that time. Few shooting sports can equal this type of red hot action on a cold winter afternoon.

Mountain Lake Biological Station

By ELIZABETH MURRAY
Dept. of Biology, U.Va., Charlottesville

IF a local resident of Giles County, Virginia, were asked what was to be found at Mountain Lake, he would probably reply, ". . . a lake, a hotel and a bug station . . . ." If pressed further as to the activities at the latter, he might say that the folk there spent their time fooling around with snakes. This reputation seems rather one-sided and limited, and so an attempt is made here to set the record straight.

The Mountain Lake Biological Station (alias 'bug station') completes its forty-first summer session this year. The station is situated nearly 4000 feet up on Salt Pond Mountain in southwestern Virginia. It has a magnificent location for inland field biology, surrounded by beautiful and largely unspoiled countryside with a rich variety of habitats and abundant flora and fauna.

Mountain Lake itself is one of only two large natural lakes in Virginia. It is almost a mile long, about a fifth of mile wide and about 150 feet deep. At the south end of the lake stands the Mountain Lake Hotel, a resort which has been in operation since 1856. Behind the hotel rises the highest point of the area, Bald Knob, 4363 feet. At the north end of the lake there are large boulders of Clinch sandstone resting on the underlying formation of Martinsburg shale, and it was probably when the boulders slid into their present position, damming up the stream which had previously flowed down this narrow valley, that the lake was formed. At the present time there are no streams running into the lake; it is fed solely from several deep springs on the bottom. Outflow is by seepage through the natural dam at the north end into Pond Drain and the New River and so eventually into the Gulf of Mexico.

The history of the lake in recorded times is known since the middle of the eighteenth century although some of the accounts about it are conflicting. The lake was discovered in 1751 by Christopher Gist, who was exploring and mapping the area for the Ohio company. It seems probable that he found the lake in very much the same condition as it is today. Since that time, reports that the lake has been completely dry on several occasions are confusing. However, it is likely that there were at least two periods when the water was extremely low if not completely absent. One of these was a prolonged period of several decades at the end of the eighteenth century during which time a number of sizable trees grew on what is now the bottom of the lake. These were partially immersed and hence killed when the lake filled up again. At the turn of the twentieth century, hotel employees sawed off the trunks of the trees to prevent damage to the lake boats, but some stumps were still seen on the lake bed by Dr. Frederick Marland, who wrote his doctoral thesis in 1967 on the lake. Another brief dry or low period is supposed to have occurred just after the end of the Civil War. Dr. Ivey Lewis, one of the co-founders of the station, recorded an eyewitness account from an elderly local lady who visited the lake during this time when she was a girl.

When Dr. Lewis and Dr. Bruce Reynolds, professors of biology at the University of Virginia in Charlottesville, founded the Biological Station in 1930, they used Thompson cottage, belonging to the hotel and close to the lake, as the laboratory. Four years later, operations were moved a mile beyond the lake to the site which the station still occupies today. This land was provided in perpetual lease to the station by Mr. John B. Laing, who owned considerable acreage on Salt Pond Mountain. Additional land is available now for station use through the generosity of Mr. and Mrs. James Wiltshire, and in the adjoining Jefferson National Forest where 1500 acres have been designated a scenic area. Biological research may be conducted by the University on this land, but timber cutting and other development will not be allowed.

Sketch by Lucile Walton, Danville

Facilities at the station have gradually increased over the years. The main stone laboratory was built in 1939 with money from the General Education Board. It was extensively renovated in 1965 with a large grant from the National Science Foundation. There is laboratory and classroom space for the running of four courses at a time, and additional rooms and equipment for about fifteen research workers. The summer session is divided into two five-week terms, so that eight courses can be given. These are taught at the graduate level on a variety of subjects. Herpetology, Invertebrate Physiology, Algology and Plant Taxonomy, Animal Behavior, Pteridology, Mammalogy and Ecological Genetics were offered in 1970. Courses include lectures and laboratory work with many field trips into the surrounding countryside. The directorship of the station is shared today by two University of Virginia professors, Dr. James L. Riopel and Dr. J. J. Murray, Jr., who run the summer session in alternate years.

There is at present living accommodation at the station for about 100 people. Four large cottages on the main lawn

The author has spent four summers at Mountain Lake since her husband became co-director of the biological station in 1964. Dr. J. J. Murray, her father-in-law and our Bird of the Month author, has taught ornithology there.

Mountain Lake (Continued from p. 17)

serve as dormitories for single people, two for girls and two for men. In addition, there are sixteen cottages and five apartments for couples and families. One of them, Rafinesque cottage, is equipped as an all-year-round unit with a small laboratory at one end and a complete efficiency apartment at the other, so that investigators may come up to do research when the rest of the station is not open. During the summer sessions all meals are provided in a central dining room, with the catering staff supplied by the Food Services of the University. The buildings are all called after station benefactors or southern biologists. The original idea was to have a place at the station named for a famous scientist from each of the southern states.

Some recreational facilities are provided, volley-ball, badminton, ping-pong, boating and swimming. There are trails through the surrounding forest which are kept cleared for hiking by members of the station. The Appalachian Trail runs within a few miles of the grounds, and there is a good hiking trail now to the Cascades, a local beauty spot and a favorite collecting area for station botanists.

In addition to Mountain Lake, the station also has its own lake, on the eastern side of the main laboratory. This was made in 1965, the construction money coming from an anonymous donor. It is an interesting lake ecologically, providing a contrast in almost every way with Mountain Lake. Whereas the latter is relatively old, deep, sheer-sided and oligotrophic (scarce in foodstuffs), the station lake is new, shallow, gently sloping and eutrophic (plentiful in foodstuffs) and hence possesses a large fauna. Studies on the two lakes produce many informative comparisons.

Most of the research done at the station draws on local material. Professor L. R. Cleveland, who was associated with the station from its founding until shortly before his death a few years ago, was the first person to demonstrate the presence of cellulose-digesting protozoa in the alimentary system of wood-feeding insects other than termites. He made detailed studies of the wood-roach, *Cryptocercus punctulatus*, which occurs commonly around the station. It feeds on wood, but depends for its digestion on enzymes produced by flagellates which live in its gut. In their turn, these protozoans depend for survival on the wood which the roach eats. This is a very good example of efficient symbiosis and Dr. Cleveland's monograph describing it, published in the Memoirs of the American Academy in 1934, still stands as one of the great classics of protozoology.

The salamanders of the area have been attracting considerable attention in recent years. Dr. James Organ, from New York, has been making extensive studies on population structure and behavior in the family Plethodontidae or lungless salamanders. About 20 or more species of these occur in the Southern Appalachians and hence are accessible to herpetologists at the station. Many salamanders have elaborate reproductive behavior and some of the courtship patterns have been observed for the first time in the laboratory at Mountain Lake and recorded on film. Due to the wide variety of suitable habitats and the fact that many of these were not frozen during the last glaciation period, the salamander fauna of this area is one of the most abundant to be found in the world.

Flowering plants always provide popular subjects for study. Besides the course on Plant Taxonomy which is often offered in the summer session, there are individual investigators with special plant interests. Dr. Ritchie Bell, from Chapel Hill, N.C., is a frequent visitor, working on distribution problems in such groups as the Scrophulariaceae and Compositae. Dr. R. K. Burns, who was originally best known for his work on the early development of the opossum, has recently devoted his energies to the orchids and lilies of the region. He has been encouraging many species to grow and proliferate in a small fenced garden round his cottage at the station, and has had remarkable success now with four lilies and over two dozen orchids which are thriving and blooming under his careful attention.

The ferns of the Appalachians form a large and highly varied plant group. Dr. Warren Wagner, who teaches the Pteridology course at the station, has collected extensively in the area. He has had considerable success in finding grape-ferns (*Botrychium*), wood-ferns (*Dryopteris*) and club-mosses (*Lycopodium*), many of them of northern affiliations and some beyond the previously known southern limits of their range. One of the Pteridology students this year collected a species within twenty miles of the station which was not formerly known east of South Dakota. Dr. Wagner has drawn on local material for his cytogenetical research on fern species and some of their hybridization problems, and is optimistic that almost any eastern temperate fern might be found in the Mountain Lake region.

Many other specialists come to the Biological Station to pursue their own research interests. The laboratory stands on the divide between the James River and Mississippi River drainage, and so freshwater biologists have a chance to sample, within a small area, animals from streams with very different destinations. Dr. Horton Hobbs, a former director of the station, has added much knowledge to the taxonomy of crayfish, through his work with species from these different drainage systems. Some of his research is carried out in association with Miss Margaret Walton who spends every summer at the station, and is primarily interested in the ostracods (small crustaceans) which live in association with the crayfish. Her sister, Miss Lucile Walton, who has contributed the frontispiece to this article, also comes every year. Her current work is on the insect which attacks the red spruce, developing what are known as 'pineapple galls' in the terminal buds and producing gross malformations in the growth of the tree.

So it is not all 'fooling around with snakes' at the 'bug station.' Actually, during the first term of the recent summer session, when Dr. Harry Jopson of Bridgewater College was teaching the Herpetology course, only one rattlesnake was brought in. This was found by the Plant Taxonomy class and hastily killed. The boys responsible asked me what one could do with a dead rattlesnake, and when I said "... cure the skin and eat the meat ..." and they realized I was not joking, they took my advice. Dr. Jopson, who always collects a large number of non-poisonous species during his course, usually manages to get one live rattlesnake during the summer. He likes to give a short demonstration with this for the instruction and safety of all members of the station, and to put it on display at the station's Open House, which is arranged sometime during the Herpetology course.

Perhaps the fact that we had neither a rattlesnake nor a copperhead on display at Open House this year will reduce our reputation for taking a disproportionate interest in snakes. And perhaps the other demonstrations of classwork and research which were on show at that time, together with these remarks, will help to give a more realistic picture of the Mountain Lake Biological Station.

The Deer Hunter (Continued from p. 7)

bard of Stuart, who has been tracking the animals for 12 years now. "It's quite a thrill to see one in your sites and know you've outsmarted him that day."

Outsmarting them to Hubbard's mind is knowing how to stay hidden, or how to creep up on a deer without the deer being aware it is being stalked.

The deer's cunning is exemplified by a story told on opening day by an oldtimer up at Sparral Rake's country store near the Union Church section of Patrick. Sitting around the store's pot-bellied stove, many a hunter has told his tale about the elusive game.

The oldtimer told how two hunters were hunting together one day. One was on the ridge, one low near some woods. It was bucks-only season.

"Those bucks are a lot smarter than the does," the oldtimer emphasized. "He'll send the does out of the woods ahead of him to see if there's any danger before he'll come out."

The hunter near the woods spotted a buck entering them. He motioned to his friend to come through the woods from the other side and flush out the buck. The friend went into the woods and reappeared claiming there was no buck in there.

"Now I know there is," the hunter persisted.

The hunter who had gone through the woods left the scene, but the hunter who had seen the buck hung around. After another hour, the waiting hunter could see the rack and head of the buck gingerly peeping out. The animal apparently thought there had been only one hunter.

There was a gun blast and before the buck knew the error of his conclusion, his life was concluded.

Many a Nimrod will tell you of the quietness with which a deer travels. One hunter told of two bucks locking horns not far from Union Church a few years ago. Then they quit and roamed slowly into the underbrush. The hunter crept up to the area expecting to see the big bucks still around, but they had disappeared without a sound and swiftly.

Deer apparently do not move completely without sound, however. Many hunters claim to hear the snort of a deer before they are ever spotted. When they are unlucky at spotting one, many Nimrods claim that the wetness of the leaves (if it had rained) prevented the "sharp-eared" human from hearing the deer's approach. If it had been dry, then it was the deer who had heard too soon the hunter coming over the leaves.

Usually hunters have good success in tree stands because deer don't expect danger from above. Many are the times these ungulates will saunter beneath an excited hunter.

If you hunt deer in the eastern, non-mountainous parts of Virginia, like Tommy B. Bowles of Martinsville does, you can enjoy the added bonus of hearing dogs bawl while they are trailing deer. He is one of many hunters who find hunting in the mountainous west "too dangerous."

Bowles presented another reason for hunting deer— tradition.

"You just have to be an outdoors man to enjoy deer hunting," he said. "You've got to be born in it. I've always been hunting, so it's in my blood. I know my friends hunt, but they don't enjoy it like I do. My dad hunted and my granddad hunted, so I was raised to be an outdoors man."

Bowles, who has been after deer for 25 years, got his fifth one opening day last November—a 16-pointer downed in Southampton County.

It was one of an estimated United States population of 4.5 million whitetail.

Camera Corner Photograph

F. D. Black, Jr. (left), displays handsome 8-point rack of his 300-pound buck, and Joey McCrickard shows more massive 10-point antlers of buck he downed in the Fairystone Park area.

A TALE OF TWO BEARS

By JAMES L. OGDEN
Game Warden
Virginia Beach

IN a three acre tract of scrub trees and wild cherries there lived two bears.

The only things wrong were, that's all the woods they had and it was located in the city of Portsmouth surrounded by housing developments and shopping centers. And to make matters worse, their home was being destroyed to make room for the new Hodges Manor High School.

The bears had first been seen by two boys playing near the school site in early June. On June 24 the cub took a walk around the neighborhood and off-duty patrolman Jimmy Harrison, who was fertilizing his lawn, saw the little bear loping along toward him.

Neighbors of Hodges Manor continued to report their sightings, but were told that what they had seen probably was just "a large dog." It was August, two months after the first sighting, before the tale of two bears in the city of Portsmouth was reported to the Commission of Game and Inland Fisheries' dispatcher in the area.

Game Warden Supervisor W. S. Rountree and Warden Kingery went to investigate and found the cub eating cherries with curious kids and neighbors looking on. He didn't seem to have a care in the world, but parents of the area were concerned about the children chasing and trying to feed the bears.

Mr. and Mrs. Harris, who live at the end of Elm Lane, had been feeding the bears several packages of hot dog rolls a day. Without their help and knowledge of the bears' habits and daily routine our task would have been a lot more difficult than it was.

Mrs. Harris said they were "city bears," and liked their breakfast rather late. She said they seldom came out of hiding until around 9:00 a.m., but from then until noon it was not unusual to see them in the clearing that ran through their domain, eating whatever they could find or what had been left for them.

Supervisor Rountree called in the state trapper and on August 5 at 4:00 p.m. a trap was set. This drew a crowd, and the bears refused to show themselves.

We left the trap after dark and arranged to be back before daylight to make sure some youngster didn't get hurt trying to see how the trap worked. The Portsmouth police agreed to check the trap periodically during the night.

I met Area Leader Elmer Walters the next day at 5:00 a.m. and we sat near the trap until the trapper decided we would not do any good that day and that he would leave to take care of some unfinished business elsewhere. We disassembled the trap door, leaving the main trap and bait so the bears could get used to it.

Two hours later Chris Wills, who lived four blocks from the woods and who had helped us unload and bait the trap, called and said the cub had arrived alone, entered the trap, eaten the bait, and was still inside playing with the trigger mechanism!

I returned and baited the trap, and made arrangements with the Game Division to move the animal the next day, for we were sure now we would catch the cub in the morning. Elmer Walters and I returned to re-trigger the trap at midnight.

The next morning Game Manager Dozier and I arrived at the site at 6:00 a.m. in his pickup, and found Elmer Walters and Jack Fentress, our game patrol pilot, already there. All was quiet. We stood by until 8:20 when Leo and I went for some coffee. When we returned 30 minutes later, it was all over.

Word spread quickly, and everyone came out to see what had been causing all the commotion. Mrs. Harris said, "It's sure nice to know you're not crazy. I knew it was not a "large dog!"

The cub was relocated in Dismal Swamp. It appeared to be about a year and half old. We hoped we would not see him again.

As for his mother, she evidently had left on her own. How she got out of town by all those houses without being seen, or how she and the cub ever found that small patch of woods in the city of Portsmouth in the first place, will remain a mystery. But for more than two months the residents of Hodges Manor and the citizens of Portsmouth had been hearing the true story of two bears.

THANK YOU, DR. MURRAY

FOR the first time in over twelve years an issue of *Virginia Wildlife* goes to press without one of Doctor J. J. Murray's superb Bird of the Month vignettes already in the making or in the editor's hands for the next month's magazine.

From all our correspondence and conversations with readers we have to rate Bird of the Month the most attractive and most enjoyed feature of *Virginia Wildlife*. Doctor Murray's vast knowledge of bird life, his keen observations, wit, and writing style, together with John W. Taylor's expertly done illustrations, have made it so.

The saw-whet owl (next page) is the 146th subject in the Bird of the Month series, which dates back to 1958, and Doctor Murray has advised us that for personal reasons he will not continue the series into 1971. We must accept his decision, but with deep regret. He has been our most faithful, consistent, and popular contributor for a long time, and we look forward to future articles from his prolific typewriter even though he will not be writing for us on a regular monthly basis any longer.

Thank you, Doctor Murray!—J.F.Mc.

Bird of the Month:

Saw-whet Owl

By DR. J. J. MURRAY
Lexington

THE saw-whet owl is the smallest of the owls that occur in Virginia and one of the rarest. It is the smallest of our eastern nocturnal birds of prey, so small that its body is no larger than that of a towhee, but its long, broad wings and heavy, downy feathers make it appear much larger. Its back is brown, flecked with white, and its breast is horizontally streaked with reddish-brown. The sexes are alike.

It is mentioned in *A Catalogue of the Birds of the Virginias*, by William C. Rives, M. D., published in 1890 at Newport, Rhode Island, by the Newport Natural History Society. Dr. Rives was, of course, a member of the well known Virginia family of that name. He quotes Captain H. C. Crumb of Cobb's Island: "Two have been taken on Cobb's Island within the last few years. A resident on the mainland;" and goes on to say, "Several have been found near Washington."

In "Birds of the Washington, D. C., Region," by May Thacher Cooke, March 25, 1929 (*Proceedings of the Biological Society of Washington*), this owl is listed as an "Occasional winter visitant for which there are about twenty records, mostly from November to February." This territory, of course, includes parts of Virginia and Maryland as well as the District of Columbia. No area in America is better covered by good observers. All this indicates the rarity of this little owl. Its small size, combined with its lack of ear tufts, makes the identification definite enough.

In summer this owl feeds largely on insects. Small wood mice form its principal food in winter; but it is fierce and courageous and has been known to attack and kill large rats and even pigeons. In hard winters their food supply becomes scarce, and they must move farther south or perish. As far as is known, its feeding habits are beneficial.

The saw-whet owl gets its name from its note, which is harsh and creaky, like filing or sawing. But this note is often given in a softer and more ventriloqual manner and is very pleasing.

I have never seen this attractive little woodland elf, but I hope that some of my readers will have that privilege some dark, cold winter night. If you do so, be sure to make a record of it.

ON THE LIGHTER SIDE

By TONY PHOENIX
Waynesboro

SKUNKS, DUCKS AND DOGS

EVERY boy should have a dog. The statement is by now a truism, but I think I can show you that there is a great deal of wisdom in it.

When I was growing up in Scott County, in the southwestern part of Virginia, a dog was as necessary and as practical as a pair of bib overalls. The dog served the primary purpose of constant companion to the boy, but more often than not, the boy also enjoyed the harmless delusion that he possessed a dog of great hunting skill.

While it was true that these mixed breeds of dubious origin served the purpose perfectly as boyhood companions, they did lack a little something in the hunting department. Lovable, yes, but try as I may, I can't remember a single one that either I or any of my friends ever owned that responded well to training. The dogs responded to eating if fed, they'd sleep in the house if you'd let them, and they provided the kind of friendship that only a boy and dog know, but training was out of the question.

Most of us, as I said, fancied that we owned hunting dogs. There were even some of us—more bold than the others—who had the audacity to proclaim that our dogs were coon dogs.

We used the term loosely. While our dogs would from time to time run a coon, I believe I see now that it was more accident than design. If you took them out often enough at night, and if they chased possums and skunks often enough, it simply stood to reason that a coon would occasionally get mixed up in the general confusion.

In memory, it seems that we always hunted under a bright, full moon. But I suspect that's just memory playing tricks on me, because I—like most of my kind over 30—have not been coon hunting, or skunk or possum hunting, with any regularity since I was a boy. Johnny Carson and the Late Late Show have replaced the sound of dogs, the smell of old kerosene lanterns, and the ghostly look of deep woods late at night.

When the dogs picked up a trail half heartedly in the distance, then opened up in hot pursuit and we took off after them with lanterns banging through the brush, a prickle of excitement always shot up the back of my neck. I'd suddenly become more alive than I'd been at any time since I'd stepped off the school bus earlier in the afternoon, turned around, and blushingly waved goodby to the little redheaded girl I was in love with at the moment.

But if the dogs caught up (as they sometimes did) and it was a skunk (as it usually was), we were in trouble. If we ran into the fight area, we were sure to become social outcasts for a few days.

Our shoes, you see, were the problem—something dogs and boys never seemed to take into consideration beforehand. The shoes we wore to school every day and the shoes we wore coon hunting were, of necessity, one and the same.

When we got skunk perfume on our coon hunting shoes (which would be our school shoes, come sunup), it added a great deal to the buzz of conversation the next day when the stove began to glow cherry red in the crowded school room where all of us were being forcibly educated.

And you could be sure of another thing: the little girl in the third row who had smiled at you from the bus window the day before would insist, today, on sitting very primly in the seat directly behind the bus driver—by herself.

The ability to pick dogs of questionable value followed me into later life. Two years ago I bought a Labrador retriever, a fine handsome dog with black coat and an intelligent bearing. I had the highest hopes in the world for him. I could imagine the two of us sitting in a duck blind, waiting until I dropped a big mallard and he could jump into the water (just as they do in all the magazine pictures) and bring the prize back to lay at my feet.

We didn't get quite that far. In fact, we never got into a boat nor saw a duck nor got close to a large body of water together. Since I lived in the Blue Ridge Mountains at the time, where ducks are somewhat scarce, he, like his spiritual predecessors, developed an affinity for skunks. It got so my wife and I would look at each other with helpless resignation when, on summer nights with the doors and windows open, we'd hear barking, then growling, then thumping around in the yard that meant another skunk had wandered onto his domain.

The retriever part of him worked like it was supposed to, however. He would retrieve neighbor's socks, shirts and assorted wearing apparel from clothes lines and small rugs from porches up to a mile away. One time he got within a few hundred yards of the front yard, dragging a completely extended aluminum lawn chair before we saw him and drove him off. We never know where he got it nor if he had the good sense to return it, and we were always afraid to try to find out. If he had shown only half the ingenuity in learning the basics of game retrieving that he did in borrowing from the neighbors, he would have been an award-winning dog.

Maybe things have taken a turn for the better. I recently became the owner of two Hungarian Vizsla pointers, a breed reputed to be one of the world's best bird dogs. They're fast, strong, smart—and already trained.

But they start life with me under a certain handicap. I'm past the age where skunk hunts hold any fascination whatever for me, and the little girls on school buses have now become big girls in offices who don't give me a second glance. So I'll expect a little more of the Vizslas than the misadventures of my earlier breeds. But not much more. The only thing expected of them—the only thing desired of them, really—is that they bird hunt.

Edited by HARRY GILLAM

80,000 Acres Reforested in Virginia

Virginia landowners and forest industries planted 58,173,940 tree seedlings, a record, during the 1970 tree-planting season. Over 57 million of this total were pine, mostly loblolly. The 1970 figure brings the total for Virginia's 54-year reforestation history up to more than 727 million seedlings. This represents 77,500 acres planted under the 1970 program.

Farmers and other individual landowners planted 22,813,861 tree seedlings on their lands—roughly 39 percent of the total. Of that number, 10,137,848 were provided free or on a matching basis by forest industry, of which the pulp and paper companies gave ten million. Industrial plantings on company lands added up to 33,868,514 seedlings (58 percent of the total), with pulp and paper companies accounting for 27,766,614, lumber and other wood-using industries being credited with 5,336,900, and non-forest industries making up the remaining 765,000.

State, federal, and municipal or county agencies were responsible for planting 1,491,565 of the total—474,500 in state forests, 229,010 by other state agencies, and 605,622 on federal lands. City and county governments planted 134,150 trees. Schools, civic clubs, and public organizations also planted 48,283.

$5 Million to Bolster Hunter Safety Programs

As soon as the president signs S. 3927 the wheels will be set in motion to divert the 10% excise tax from handguns into hunter safety and shooting instruction programs. It is estimated that this will total some $5 million, which has been going into general revenues. Millions of sportsmen and thousands of outdoor writers waged a four year battle to gain these funds for wildlife restoration, hunter safety and shooting range construction programs. Senator Phillip A. Hart introduced the measure and, with the help of his colleague senator Scott and Rep. John Dingell, guided it through the congress.

Sportsmen have been paying this 10 percent tax on handguns since 1937, but the proceeds have been going into general revenue rather than into sportsmen's programs. Half of the moneys will now go into the Federal Aid to Wildlife Restoration fund, better known as the Pittman-Robertson fund, for financing wildlife research and developing hunter facilities. The other half will go to the states for development of hunter safety programs under some sort of federal guidelines yet to be announced. Construction of public outdoor target ranges is also permissible with these funds. Education monies are available only on a 50-50 matching basis with state or local funds. Many have thought that this program may help to counter the bad press that pistols in particular and all guns in general have been getting lately.

Jaycees Head Lake Cleanup Campaign

Recently, the Commission operated Lake Orange in Orange County became so congested with trash and rubbish from careless "sportsmen" that the sight became unbearable. With the cooperation of local game warden J. W. Crickenberger, the Orange County Jaycees undertook a project to clean up the lake. After a mass clean-up campaign, involving boats and many man hours of labor, the banks were again presentable. At the conclusion of the effort, barrels were placed and signs erected to remind those who use the lake of the proper place for trash.

New Trail Map

The Potomac Appalachian Trail Club has recently published the 8th edition of Map #9 covering the Northern Section of the Shenandoah National Park.

It is an entirely new product with new features, new insets, new profiles, and an original drawing of Grayol Springs Shelter contributed by Club member Bethea Owen. This map is the most thoroughly field-checked of any we have issued.

The maps may be purchased direct from the publisher, Potomac Appalachian Trail Club, 1718 N Street, N. W., Washington, D. C. 20036, at $.75 each, postage paid.

Record Carp Bagged

This 60 pound carp held by taxidermist William R. Six was taken from a private pond in Wythe county by Wytheville Bowhunter Ben A. Topham. Although there are no official records, it appears to be the largest ever taken by this means. The current world rod and reel record is a 55 pound 5 ounce specimen from Clearwater Lake, Minnesota. However, the largest specimen ever recorded came from Pretoria, So. Africa, in 1952 and weighed 83 pounds 8 ounces, according to Tom McNally's **Fishermen's Bible.** It certainly sets a hard mark for Virginia bowmen to beat.

Proud of Husband's Catch

Mrs. Raymond Berry of Arlington holds the 5 pound 3 ounce largemouth that her husband caught from Perks Mill Pond recently. The fish is a little darker than the average largemouth.

Edited by ANN PILCHER

It All Started When . . .

By BECKY JOHNSON

White Sulphur Springs, West Virginia

The author rounding a barrel in the Cloverleaf Barrel Race on her racing Quarter mare, Bobby Mu.

IT is amazing how events of great interest to us sometimes have their beginning in such incidental fashion. For example, take the year 1968 when I won the Quarter Horse Race at the State Fair.

Now winning a race is nothing unusual, for many races are won every day. And the fact that I was a seventeen-year-old girl was also very ordinary, for many girls love and work horses. But it was a great event to me, and it had an unusual beginning.

It was the Fall of 1956 when it all started, and I was 5 years old. The great event of that year, which I will always remember and cherish, was my first days on a trapline. Dad had taken a two-week vacation and we moved onto the farm with Granddaddy, where Dad himself had tended his first trapline many years earlier. It was understood well in advance that any money derived from the trapline would go into a pony fund. This would be a starter, with high hopes that there would be other projects to help realize my childhood dream.

It was a lovely fall day when we laid out the line. We had gathered up Dad's old No. 2 double underspring fox traps and boiled them in walnut hulls, along with some small pieces of wire, a pair of pliers and an old farm hatchet. For days we had been rounding up sardines, oil of anise, cracklings (from rendered lard), rhodium, and various other potencies, which we reinforced with a few cryptic phrases as we prepared our baits and scents.

Then there were rubber boots that were dipped into the walnut hull ooze, and gloves and caps with ear lugs to use on frosty mornings.

We borrowed a haversack from Granddaddy to carry the traps in and set off to the mountain to match wits with shadowy furbearers that threaded the silent trails at night; and thereby to share one of those unique thrills that comes only with one's first trapline travels.

We learned how to hide a trap so that we could not find it ourselves.

I smoothed out the stump set with a stick.

There was Newton, my older brother; Michael, my younger brother; Dad, and myself. And we must have been an odd looking procession as we climbed the steep face of Flat Mountain, seeking out game trails that Dad had known and trapped in years prior to World War II.

In those two weeks we were to learn to walk with care, to cover our trail with such precision that it could not be detected, and to hide a trap so that we could not find it ourselves. We learned the dirt-hole fox set, where the bait is placed in a small hole and the trap set before it. We made smooth beds of finely pulverized rotting wood in decaying logs and hid traps in them, baiting them later after the human odor had vanished. We learned the stump set and various den sets. But most of all we experienced the exultation that comes only with one's

first catch on a crisp autumn morning.

But all was not smooth and easy. It snowed one night and Granddaddy insisted that the trail would be too bad for me. But I won that argument, or at least partially. I never admitted how terribly tired I was when we returned from that long tramp.

Then there were disappointments. Take the stump fox set that I made all by myself—all, that is, except for compressing the double springs of the trap, which were much too strong for my tiny hands.

I dug a small impression into the rotted wood. This I lined with two large damp leaves that I found under a windfall. Onto this I placed the trap and covered the pan with another leaf, dry this time and slightly cup-shaped so it would set down over the pan and keep my

"Hurry up, Dad! I don't trust this guy!"

covering material from going under it and blocking its operation. Then I crumbled rotted wood until it was well pulverized and covered the trap, being careful not to get any wood in the hinge of the jaws and covering the jaws themselves with a layer of dust that was ever so light.

After the set was completed I leveled my work out with a stick, added a few bits of bait and a drop or two of a vile-smelling fox scent that we had prepared earlier, and brushed my tracks out with a cedar limb as I backed away. And when it was finished I was real proud of my handiwork.

We were certain we would nail a fox in that one, but alas! A skunk found the

This fox was not happy about the situation, and it wasn't hard to understand why. A broken down ear indicated that this was not his first rough experience.

set that first night—and that was that. We moved the trap.

At another set we caught a weasel, but something found it before morning and all that was left were a few pieces of skin and the portion of a foreleg that was below the trap jaws.

"It looks like the work of an owl," Dad said. So we dug down into our bag of tricks and came out with a special owl set.

We found a small hickory shoot, no larger than my wrist. We cut off the top and removed all limbs, rubbing dirt onto the patches where white wood showed. We then bent the hickory over and hooked it lightly beneath the edge of a protruding rock. To this we fastened a light trap and hid it under the leaves. Then between the trap and the rock we planted half of a rabbit that we were carrying for bait, and pinned it to the ground with a stake.

When the set was finished we backed away, brushing the leaves gently to eliminate our tracks, and continued on to check the balance of the line.

The next morning we found a great horned owl hanging in mid-air. He had jerked the hickory sprout from under the overhang, letting it straighten. Then he had worn himself out fighting the air without doing serious damage to his imprisoned foot. And his great yellow eyes, narrowed against the light of day, followed our every movement as we prepared to remove him from the trap.

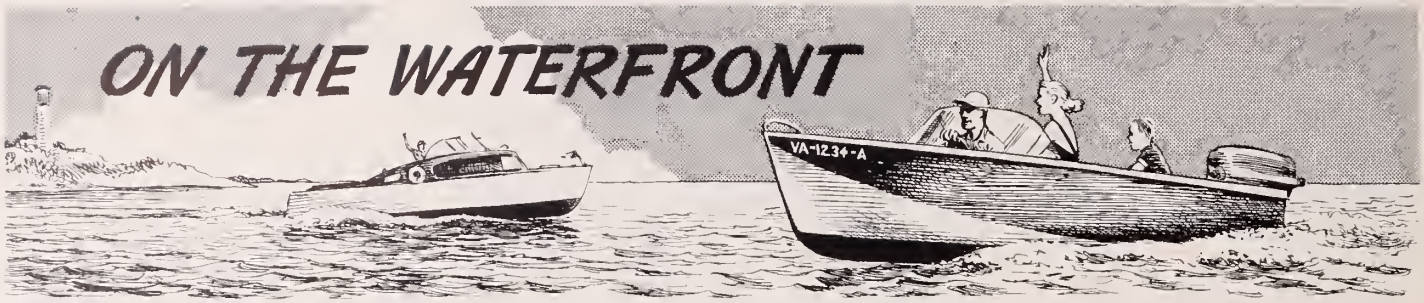
In anticipation we had brought along a burlap sack, and into it we worked the owl. We took him in alive and turned him loose in Granddaddy's granary loft to feast on rats and mice for the next several days. When we pulled the line we opened the end loft door and let him fly back to his mountain haunts, and when he was gone Granddaddy noted a sharp decrease in the rodent population.

The snow went off with a rain and we were certain it would spoil some of our sets, but we had a real surprise that morning. There were two mink, both caught in den sets along a mountain brook, and both drowned with no damage to the trapped foot.

When the two weeks were over our count included foxes, two skunks that we let go along with a small possum, and our two mink—all a product of pretty days, rain, snow and bitter cold. But I guess I was just the outdoor type from the beginning, for I never missed one day on the line. And our effort was successful to the point that within a week after we cashed in our bundle of pelts there was a lovely pony in the little log barn on the hillside in back of our home.

Yes, it all had its beginning on a beautiful fall day back in 1956—my love for horses and my winning that race. And my only regret about those two weeks on the trapline is that such outdoor experiences have now become history to the extent that few children today are privileged to share in them.

There was a mink for Newton . . . and one for me. And they gave the pony fund a real boost.



Edited by JIM KERRICK

Boating Quiz

Here is a short quiz that covers several aspects of recreational boating. If you don't score as well as you should, spend a few hours getting boned up on boating. It will pay off during future boating seasons.

1. Measuring the depth of the water is called _____.
2. How many approved life preservers must motorboats carry? _____
3. Gasoline fumes are heavier or lighter than air? _____
4. Red buoys mark the _____ side of the channel when entering from sea.
5. When anchoring, a scope of at least _____ to one is used.
6. A ski belt is not an approved life-saving device. True or false? _____
7. Every boatman is responsible for his own wake. True or false? _____
8. When refueling portable gasoline fuel tanks, they should be filled on the dock and the hose nozzle grounded. True or false? _____
9. Boat trailers must have a State inspection every six months. True or false? _____
10. Under the Uniform Regulatory Marking System a diamond with a cross on it means "Boats Keep Out." True or false? _____

ANSWERS

1. Sounding
2. One for each person
3. Heavier
4. Right
5. Seven
6. True
7. True
8. True
9. True
10. True

Documented: Not Exempt

The Coast Guard advised that many owners and operators of documented vessels wrongly believe themselves exempt from complying with state boating equipment laws and regulations.

"According to information from several state authorities," said Rear Admiral Joseph J. McClelland, Chief of the Office of Boating Safety, "many documented vessel owners believe they are not required to meet state regulations, and are exempt from boarding by either Coast Guard or state enforcement personnel."

"This is not true," the Admiral emphasized. Unless specifically exempted by state laws, he explained, documented yachts operating in State Waters MUST COMPLY WITH THAT STATE'S EQUIPMENT REQUIREMENTS, LAWS, AND REGULATIONS.

"Very few vessels are free from these requirements," he pointed out. "If you are not sure whether your yacht is exempt, you should find out now, BEFORE you are boarded."

Canoe Correspondence Continues

Dear Mr. Kerrick:

With great interest I followed the comments of Mr. McKeldon Smith about canoes and outboard motors, in your October issue.

As commodore of the Dale City Boating Association, I am sufficiently spoiled with high powered motors that our group uses for water skiing and also for bay fishing.

Occasionally, however, I try to get away from it all. Usually accompanied by one of my three boys and an aluminum canoe, I set out for some quiet undisturbed run of water and enjoy the peaceful atmosphere of nature.

However, all too often we take on too much of a chore, and towards darkness and far from our destination yet I catch myself wishing we had a little outboard motor along, to get us there faster and easier.

With that in mind I read Mr. Smith's article with some skeptical reservations, and even his closing comparison with an electric golf cart brought a quick "so what!" to my mind. Stubbornly I also counted up all the advantages of a motorized sailplane. But when he compared it with a worm on a trout fly, that did the trick. As an avid fly fisherman I got the message loud and clear, and I see now what Mr. Smith is trying to convey; better yet, I fully agree with him.

—KARL H. RIES
Dale City

Proper Winterizing Necessary for Motor

Improper winter storage will do more harm to your outboard motor than three seasons of normal operation.

Moisture is the biggest culprit. During the course of the winter, it will rust piston rings and cylinder walls; shorten the life of lower unit gears; and corrode the ignition and fuel systems. Any one of these would result in a costly and time-consuming repair job.

Fogging oil offers effective protection of internal engine parts. With the engine running in fresh water, either on the boat or in a test tank, inject this rust preventative directly into the carburetor intake. Give it several good squirts. Allow the engine to run a few seconds, circulating the oil throughout, before shutting it off.

Drain the lower unit. Watch carefully for traces of water. This would indicate a crack or distortion in the gearcase preventing a perfect seal. This damage could occur if you struck an underwater obstruction. If you suspect problems, your marine dealer is the man to see. If everything checks out, refill the lower unit with a lubricant recommended by the outboard manufacturer.

Drain residual water from the outboard by pulling the starter rope several times. The engine should be in an upright position out of the water. The throttle should be fully advanced and the gear shift set at neutral.

The entire fuel system should be drained and flushed with acetone or lacquer thinner to remove gummy deposits. This includes the tank, line and carburetor.

If the propeller is nicked or bent, a marine dealer can repair or replace it. Keep the old prop as an emergency spare.

Complete the job with a light coat of oil over all exposed metal parts. If you own an electric start outboard, remove the battery. Clean it, make sure it's fully charged and store it in a cool, dry place.

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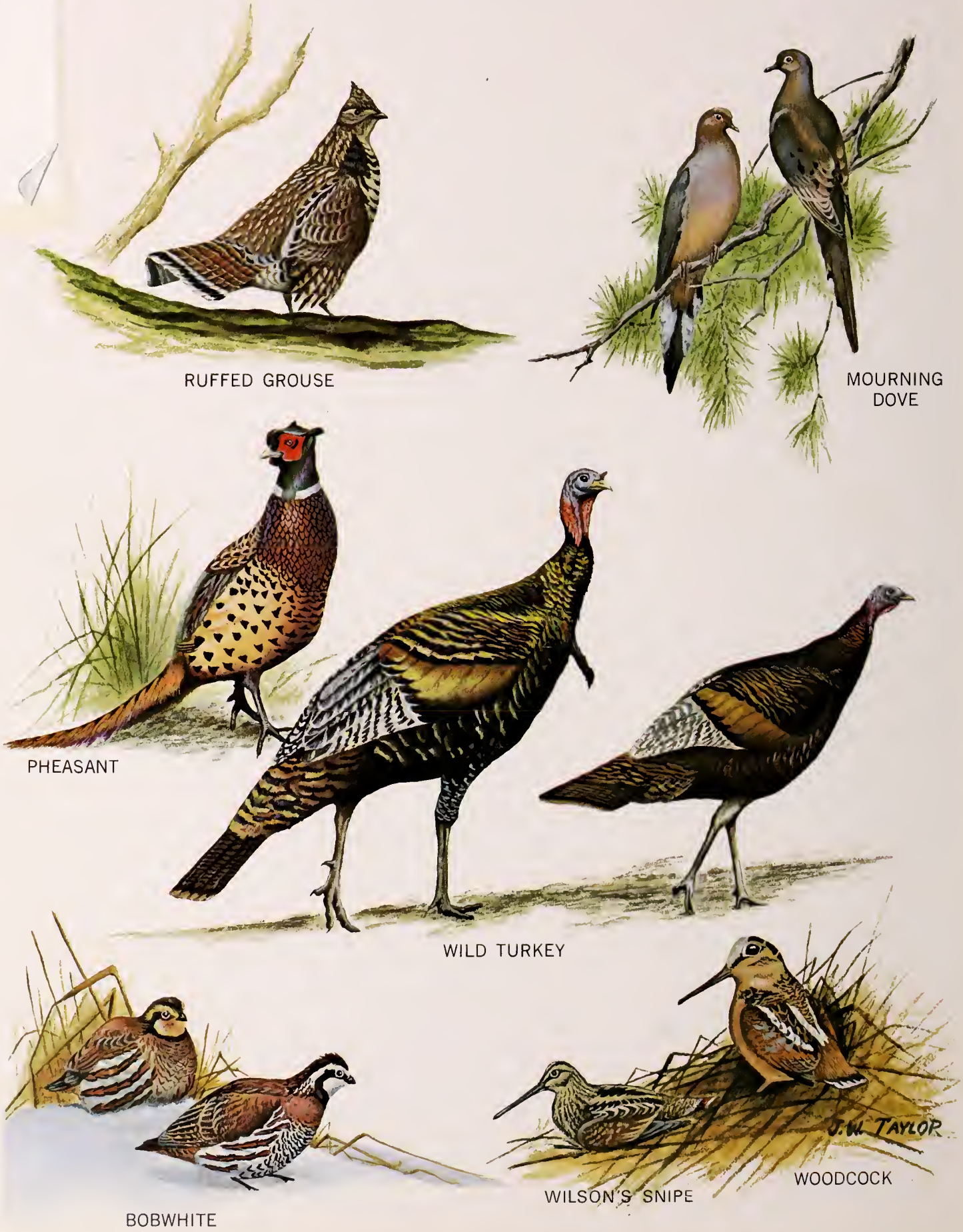
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